

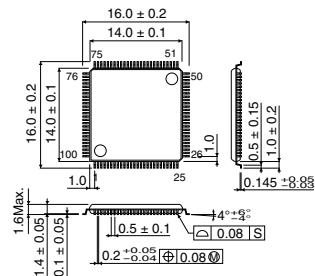
Signal processor LSI with anti-shock memory controller for CD players

BU9534KV

● Description

BU9534KV is a digital signal processor LSI with built-in pre-servo amplifier, and anti-shock memory controller developed for CD players. This pre-servo amplifier is applied to CD-RW disc. Approximately 180sec. music data can be stored in memory by connecting with 64Mbit SDRAM.

● Dimension (Units : mm)



VQFP100

● Features

- 1) Anti-shock memory controller corresponds to EDRAM, and SDRAM. Maximum 180sec. of music data can be stored by using 4bit compression mode and 64bit SDRAM.
- 2) Built-in pre-servo amplifier for playing CD-RW
- 3) Tracking, Focus automatic control
- 4) Built-in wide PLL, CLV
- 5) Symmetry correction function
- 6) Built-in x8 over sampling filter + 1bit DAC
- 7) Digital bass boost, soft mute function

● Applications

Portable CD players

● Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Maximum applied voltage	Vcc	4.5	V
Power dissipation	Pd	1000	mW
Operating temperature range	Topr	-25 ~ 75	°C
Storage temperature range	Tstg	-55 ~ 125	°C

Derating : 10mW/°C for operation above Ta=25°C

● Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating power supply voltage	V _{DD}	2.5	—	3.3	V

● Electrical characteristics (Unless otherwise noted; Ta=25°C, V_{CC}=3.0V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Circuit current	I _O	—	28	35	mA	
Audio-DAC distortion	THD	—	0.01	—	%	0dB, 1kHz
Audio-DAC range	DR	—	90	—	dB	-60dB, 1kHz
Audio-DAC S/N rate	S/N	—	96	—	dB	
Servo-ADC Max. conversion voltage	V _{ADH}	1.0	1.2	1.4	V	
Servo-ADC Min. conversion voltage	V _{ADL}	-1.4	-1.2	-1.0	V	
Servo-ADC Max. output voltage	V _{ADH}	0.8	1.2	—	V	
Servo-ADC Min. output voltage	V _{ADL}	—	-1.2	-0.8	V	
RF amplifier Max. output amplitude	V _{RFH}	1.1	1.3	—	V	
RF amplifier Min. output amplitude	V _{RFL}	—	-1.3	-1.1	V	

● Application Circuit

